



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

September 30, 1994

Steven L. Costa  
Project Manager  
CH2M Hill  
P.O. Box 12681  
Oakland, CA 94604-2681

Re: Third Bioassay Test of Ocean Disposed High-Strength Waste of  
StarKist Samoa, Inc. and VCS Samoa Packing Company

Dear Steve:

We have reviewed the two options proposed in your letter of September 14, 1994 for the timing of the third bioassay test required by the canneries' ocean disposal permits. We believe that information obtained during the different seasons would prove valuable. Thus, your proposal to change the schedule of the final bioassay test from December 1994 to June 1995 is approved. We understand that this will extend the term of the study beyond that stated in the permits. Since the modeling and evaluation will have been started on the first sets of data, we would expect to see the final study results by October 1995. As you know, the permits expire on August 31, 1996, and the canneries should reapply for permit renewal a few months prior to this expiration date. Because of the implications this report has for the designated ocean disposal site, we would like to receive the modeling and evaluation report with ample time to review it prior to the reapplication period.

Please call me at (415) 744-1594 if we need to discuss this further.

Sincerely,

*Pat Young*

Pat Young  
American Samoa Program Manager  
Office of Pacific Island and Native  
American Programs (E-4)

cc: Jim Cox, Van Camp Seafood Company  
Norman Wei, StarKist Seafood Company  
Tony Tausaga, American Samoa EPA  
Sheila Wiegman, American Samoa EPA  
Allan Ota, W-3-3  
Amy Wagner, P-3-1

OPTIONAL FORM 99 (7-90)

## FAX TRANSMITTAL

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To	Dave Stuart	From	Walter Frick
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NSN 7540 01-317-7368 5099-101		GENERAL SERVICES ADMINISTRATION	

November 1, 1993

MEMORANDUM

SUBJECT: Comments on Steve Costa 27 Aug 93 letter: Joint Cannery Outfall Model Prediction Verification Study Plan

FROM: Walter E. Frick

TO: David Stuart  
Region 9

I have read the subject report and find it functionally satisfactory but repetitive and confusing on a literary level. I hope ensuing program reports will be written with greater focus and clarity.

The modeling program outlined in this study plan appears to address important modeling concerns: data collection, reduction, and analysis, modeling, validation, calibration, and verification.

I'm aware of CH2M's attachment to UDKHDEN and I think the model will give sufficiently conservative estimates of initial dilution. However, with the publication of "Dilution Models for Effluent Discharges (Second Edition)" (EPA/600/R-93/139, July 1993) imminent, I recommend the use of UM over UDKHDEN. I think the results will be somewhat more realistic beyond the trapping level and, as an extra benefit, it makes provisions for including background concentrations.

The capabilities of the PT121 Model appear to be commensurate with the problem of transport in the harbor. However, I have no first hand experience with it.

The section on quality assurance is largely satisfactory. However, some attention should be paid to the quality of the field data, particularly salinity and temperature stratification data. Sensitivity analyses, as described, are important but tuning should be kept to a minimum. Extrapolation also presents potential problems, as noted.

cc: David Young